

DEC 28 2005

**Summary of Safety and Effectiveness**

**K052425**

**Submitter:** Zimmer, Inc.  
P.O. Box 708  
Warsaw, IN 46581-0708

**Contact Person:** Stephen H. McKelvey  
Manager, Corporate Regulatory Affairs  
Telephone: (574) 372-4944  
Fax: (574) 372-4605

**Date:** September 1, 2005

**Trade Name:** Zimmer® Computer Assisted Solutions -  
Electromagnetic and Imageless Knee  
Instrumentation

**Common Name:** Image Guided Instrument

**Classification Name  
and Reference:** Stereotaxic Instrument  
21 CFR § 882.4560

**Predicate Device:** Zimmer Ortho Guidance Systems - Knee  
Instruments, manufactured by Zimmer, Inc.,  
K033011, cleared February 12, 2004.

**Device Description:** This submission is for:

- Zimmer orthopedic manual knee instruments that have a slot that accommodates a Medtronic electromagnetic tracking sensor, and
- The addition of digitized landmark (imageless) referencing to the indications for use for both optical and electromagnetic tracking sensors.

**Intended Use:** Zimmer Knee Computer Assisted Solutions  
Instruments are intended as accessories to Image  
Guided Surgery systems and are indicated for any  
knee orthopedic medical condition in which the use  
of stereotaxic surgery may be appropriate, and  
where reference to a rigid anatomical structure, such  
as a long bone, can be identified relative to a CT or  
MR based model, fluoroscopy images, or digitized

landmarks of the anatomy. Example orthopedic procedures for these instruments include, but are not limited to:

- Total Knee Arthroplasty (Primary and Revision)
- Unicompartmental Knee Arthroplasty (Primary and Revision)
- Minimally Invasive Knee Orthopedic Procedures

**Comparison to Predicate Device:**

Both the predicate and proposed devices are indicated for use with image guidance surgery systems. Both are accessory instruments.

**Performance Data (Nonclinical and/or Clinical):**

Non-Clinical Performance and Conclusions:

Accuracy validation and verification testing was conducted for instruments used in conjunction with Medtronic StealthStation Image Guidance Systems.

Clinical Performance and Conclusions:

Clinical data and conclusions were not needed for this device.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

DEC 28 2005

Mr. Stephen H. McKelvey, MA, RAC  
Manager, Corporate Regulatory Affairs  
Zimmer, Inc.  
345 East Main Street  
Warsaw, Indiana 46581-0708

Re: K052425

Trade/Device Name: Zimmer® Computer Assisted Solutions-Electromagnetic  
and Imageless Knee Instrumentation

Regulation Number: 21 CFR 882.4560

Regulation Name: Stereotaxic instrument

Regulatory Class: II

Product Code: HAW

Dated: December 15, 2005

Received: December 19, 2005

Dear Mr. McKelvey:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0115. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Mark N. Melkerson  
Acting Director  
Division of General, Restorative  
and Neurological Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K052425

### Device Name:

Zimmer® Computer Assisted Solutions - Electromagnetic and Imageless Knee Instrumentation

### Indications for Use:

Zimmer Knee Computer Assisted Solutions Instruments are intended as accessories to Image Guided Surgery systems and are indicated for any knee orthopedic medical condition in which the use of stereotaxic surgery may be appropriate, and where reference to a rigid anatomical structure, such as a long bone, can be identified relative to a CT or MR based model, fluoroscopy images, or digitized landmarks of the anatomy. Example orthopedic procedures for these instruments include, but are not limited to:

Total Knee Arthroplasty (Primary and Revision)  
Unicompartmental Knee Arthroplasty (Primary and Revision)  
Minimally Invasive Knee Orthopedic Procedures

Prescription Use X AND/OR Over-The-Counter Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D) (21 CFR 807 Subpart C)

(Please do not write below this line – Continue on another page if needed)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

*for  
KBM* K052425 *Barbara Bush MD*  
**(Division Sign-Off)**  
**Division of General, Restorative,  
and Neurological Devices**

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